**NASA Ames Research Center**
**Historic Preservation Office**

**NETS CRM FY2017**
**Heritage Tourism Summary**

Over 36,000 people attended organized events in and around historic properties at NASA Ames Research Center at Moffett Field, California during fiscal year 2017. Highlights included lectures and appearances by NASA astronaut Steven L. Smith, the Breakthrough Prize in Life Sciences and Physics Award Ceremony with astronauts Scott and Mark Kelly, the Solar System Exploration Research Virtual Institute's fourth annual Exploration Science Forum, the Kepler and K2 Science Conference, and second annual Innovation Fair. Of particular note is the ongoing, vibrant presence of sixty educational institutions and commercial aerospace ventures in the NASA Research Park.


*Breakthrough Prize in Life Sciences and Physics Award Ceremony with Appearance by NASA Astronaut Twins Scott and Mark Kelly Hangar 1, Shenandoah Plaza National Historic District*

NASA image ACD16-0204-040 (top)
NASA image ACD16-0204-091

**Year-round Activities**

In addition to scheduled events, the Shenandoah Plaza National Historic District is used year-round by the NASA Research Park (NRP), a thriving research and education community comprised of academic institutions, non-profit outfits, and Silicon Valley aerospace and technology companies. The sixty organizations in the NRP now occupy nearly two million square feet of space in the historic district. NRP partners provide the means for students and professionals to visit, study, and work in the district year round.

The Shenandoah Plaza National Historic District is open to the general public every day for unguided walking tours. The Moffett Field Historical Society Museum, which is located in front of Hangar 1, is open year round for the purpose of educating the public about the history of Moffett Field, including NASA's contributions to aviation. Visitors have access to museum exhibits, a library, speakers, docent tours, and special events. Moffett Chapel holds Sunday services, weddings, memorials, and special events such as a National Day of Prayer ceremony for the public.

*Guided Tours.* Public events in and around historic properties on the Ames campus are not commonly held, owing to the security requirements for entry, so Ames regularly organizes guided tours of these less-accessible areas. Throughout fiscal year 2017, staff led tours of historic facilities such as the Arc Jet Laboratory, Flight and Guidance Simulation Laboratory, and in the Historic Wind Tunnel District, including the National Full-Scale Aerodynamics Complex and the Unitary Plan Wind Tunnel Complex. Over 5,000 people attended guided tours of historic properties on the Ames campus.

*Year-round tours of facilities in the Wind Tunnel Historic District* Image credit: Joe Sacco
*National Full-Scale Aerodynamics Complex (Building N221) 80 x 120-foot Test Section*

*Year-round tours of facilities in the Wind Tunnel Historic District*
*Unitary Plan Wind Tunnel Complex (Buildings N227, N227 A-D)*

Image credit: Jim Prunty

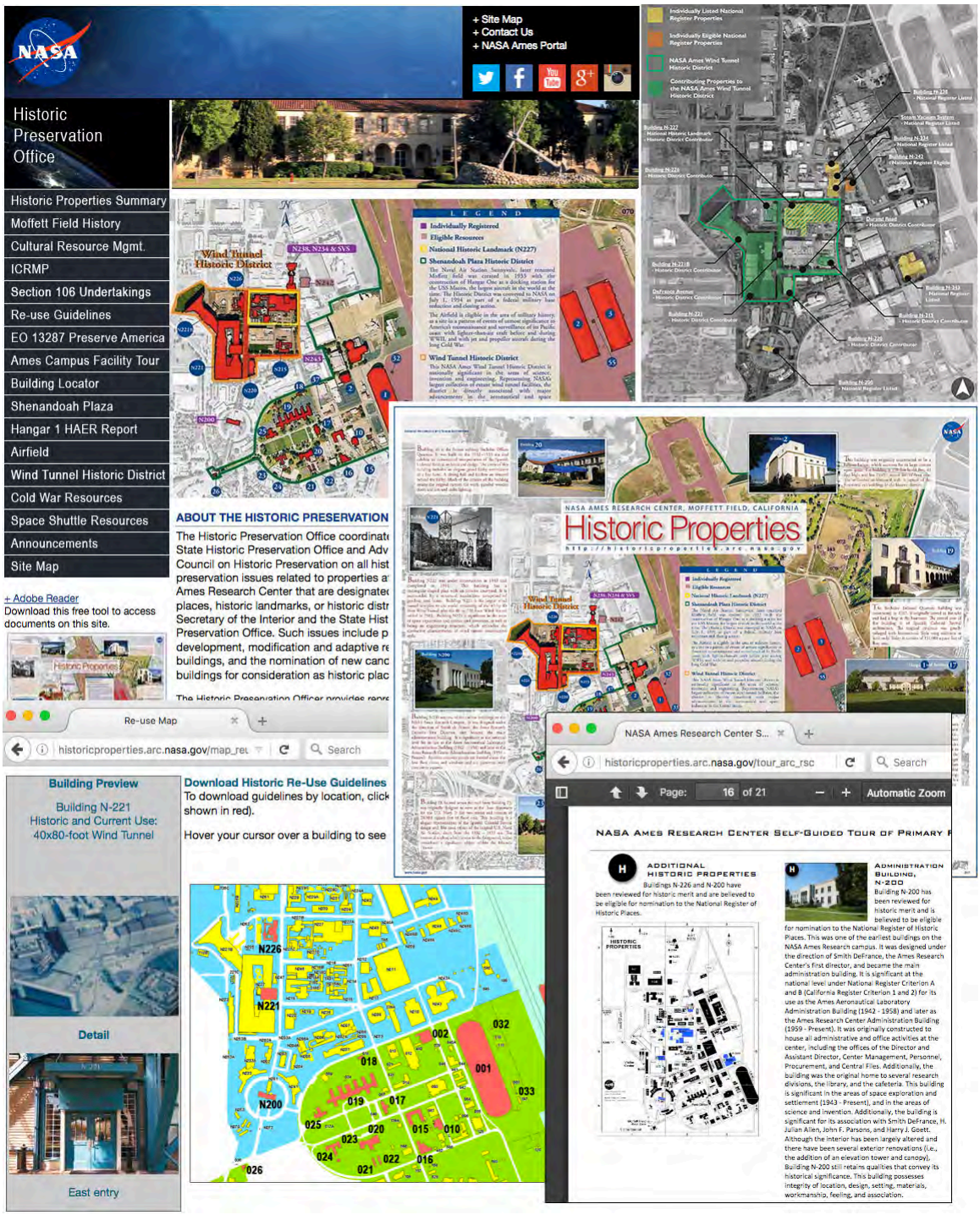

*Year-round tours of facilities in the Wind Tunnel Historic District*
*Unitary Plan Wind Tunnel Complex (Buildings N227, N227 A-D)*

Image credit: Jim Prunty

*Year-round tours of the Flight and Guidance Simulation Laboratory (Building N243)*

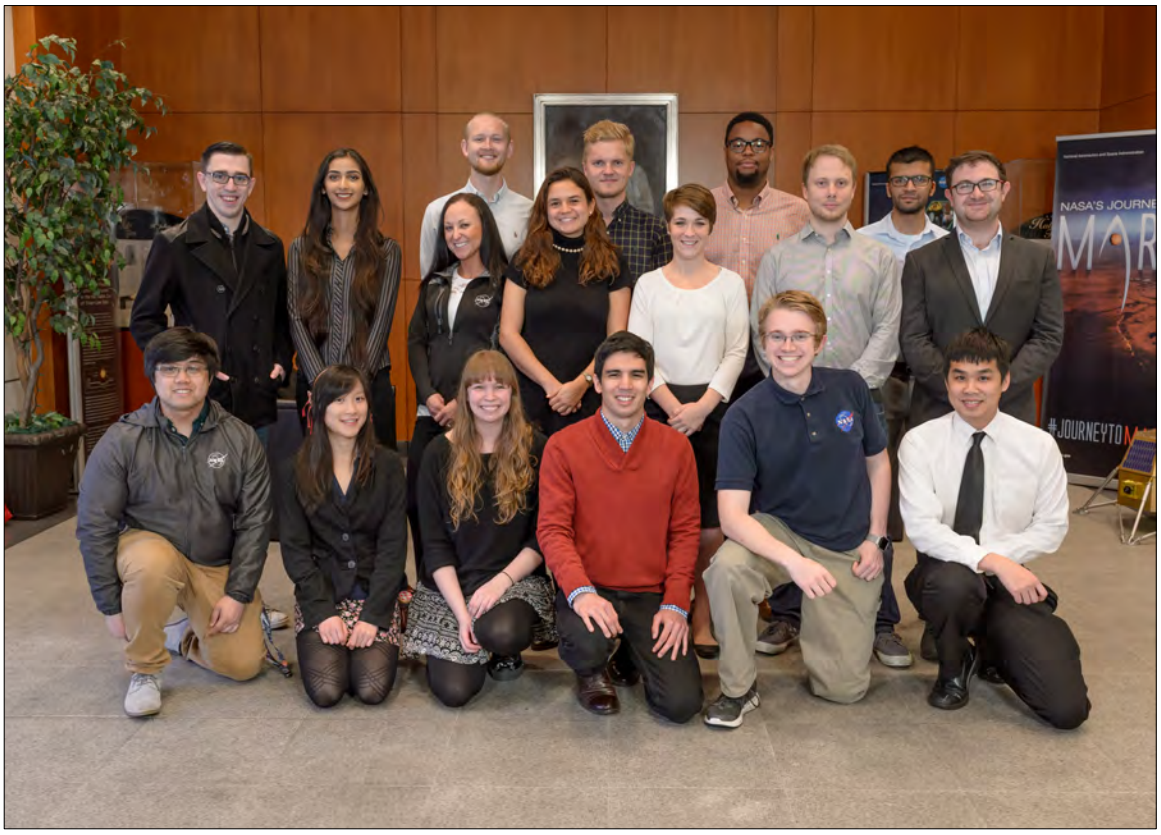
Image credit: Lynbrook High School

*Walking Tours.* The Historic Preservation Office maintains online resources such as self-guided walking tours through the Shenandoah Plaza National Historic District to educate visitors about historic properties. For those who have access, self-guided walking tours are available for the Ames campus as well. These resources, which include maps linked to photographs and building descriptions, also serve as virtual tours for those who are unable to visit the center in person.




*Downloadable and interactive maps, photographs, reports, and other resources on the Historic Preservation Office website accommodate self-guided or virtual tours of historic properties on the Ames Campus and in Shenandoah Plaza.*

**Science, Technology, Engineering, and Mathematics Educational Activities for Students**

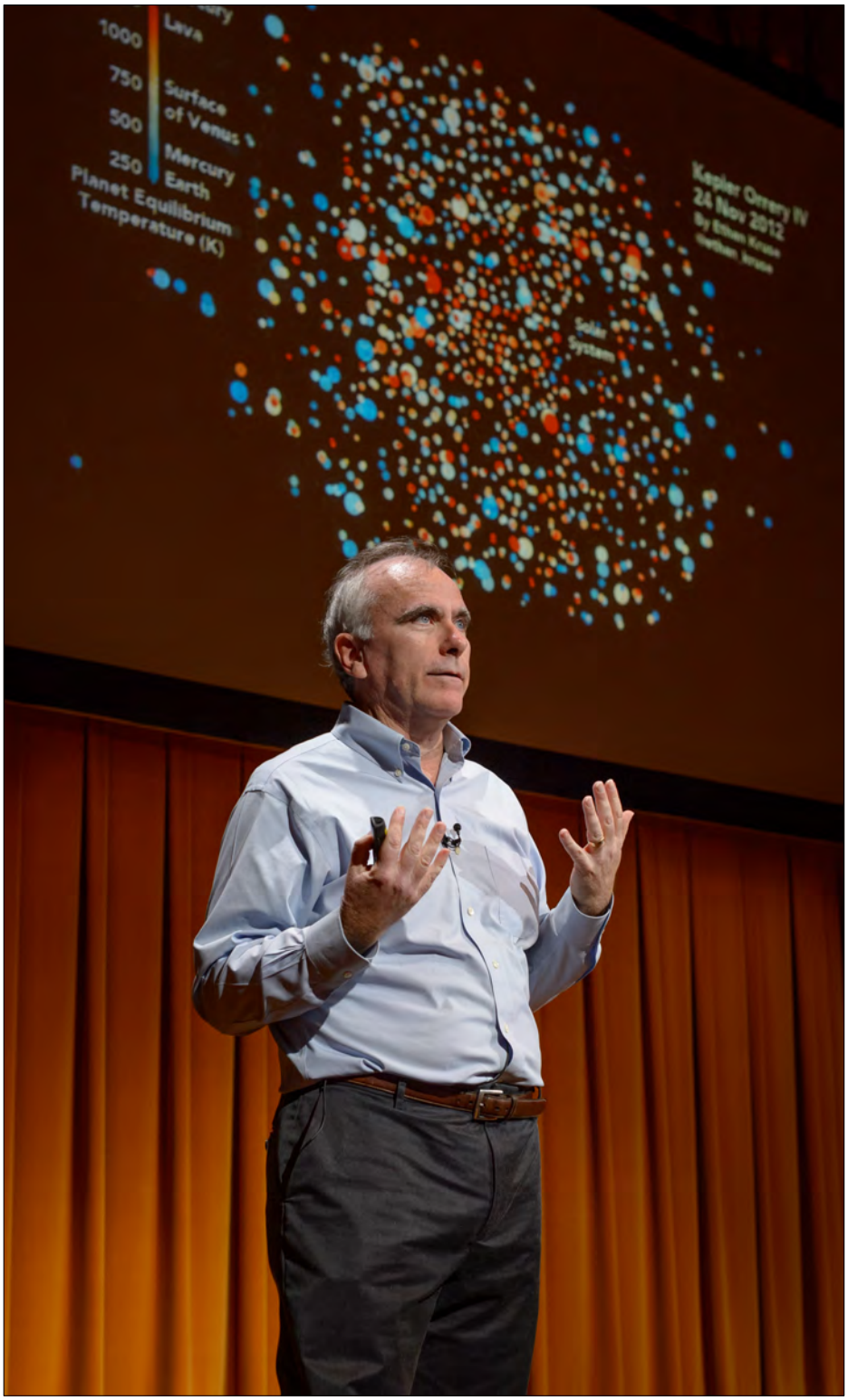



*Spring student intern class*
*Historic Administration Building N200, Ames Campus*

NASA image ACD17-00042-004

Ames hosted over 8,500 students this year, who worked in and around historic properties. A lecture series organized for summer students included sixteen STEM-themed talks followed by social gatherings in the historic administration building. Combined, expected attendance for these lectures is estimated at 3,520. At summer's end, students are invited to attend a picnic and to present their research at a public poster session on the parade grounds in the heart of the Shenandoah Plaza National Historic District. Projected attendance for this event is 2,500. These activities are combined with the center's annual celebration of Diversity and Inclusion day, in which the diversity of the Ames workforce is on display through various educational booths rimming the parade grounds,

Year-round programming for 4th-through 6th-grade classes is held in the Ames Exploration Encounter (AEE), which is in the 6-by-6-foot Supersonic Wind Tunnel in the heart of the Historic Wind Tunnel District. AEE programs are designed to teach basic concepts and inspire positive attitudes about science, technology, engineering and mathematics. Guided by educators, students are led through hands-on activities that explore themes involving physics, flight, space, and earth. This year's attendance in AEE is estimated at nearly 6,000 participants.




*Summer Student Lecture Series* NASA image CD17-0023-008
*Mark Marley Presents "On the Road to the Pale Blue Dot"*
*Historic Administration Building N200, Ames Campus*


*Summer Student Lecture Series* NASA image ACD17-0043-019
*David Blake discusses the importance of minerals and mineral structure to the natural history of biogenic elements. Historic Administration Building N200, Ames Campus*

**Selected Special Events**

Most special events for the public take place in the Shenandoah Plaza National Historic District. This unrestricted portion of the center accommodates events of all sizes.

The NASA Research Park (NRP) hosted a lecture featuring astronaut Steven L. Smith who showed space videos and discussed his experiences as an astronaut. Smith is a veteran of four Space Shuttle missions (STS-68, STS-82, STS-103, and STS-110) covering 16 million miles, and seven space walks totaling 49 hours and 25 minutes.

Astronaut Smith made a special appearance at this year's holiday festival to share his experiences on Space Shuttle missions and to pose for photographs with attendees. Activities for children included a Remote Control Car Obstacle Course Challenge, an "Insights into Science and Robotics" demonstration, a hands-on STEM project led by Girl Scouts, and an Interactive Jedi Academy show. Santa Claus arrived on a NASA Ames fire truck and posed for photographs. The event included refreshments, live music, face painting, a photo booth, and cultural performances including Brazilian Capoeira, Polynesian, and Mexican Folkloric Dancing throughout the day.

Ames invited staff to take their children to work for the National Take Your Daughters and Sons to Work Day. Activities included a lithograph signing session with astronaut Steve Smith, a spring student intern poster session, robotics and energy transfer demonstrations, as well as tours of various facilities, including historic properties (Technical Services Building N220 and Vertical Motion Simulator N243). This event was

combined with a large picnic for employees, their families, and students in NACA Park, which is surrounded by historic properties

*Breakthrough Prize in Life Sciences and Physics Award Ceremony*
*Hangar 1, Shenandoah Plaza National Historic District*
NASA image ACD16-0204-084

The Breakthrough Prize in Life Sciences and Physics Award Ceremony was held at historic Hangar 1 for a third year in a row. This high profile event honors breakthrough research, celebrates distinguished scientists, encourages STEM education, and strives to generate excitement about the pursuit of science as a career. NASA astronauts Mark and Scott Kelly were among those who presented the prizes at the event. Celebrity participation included Morgan Freeman as host, along with participation from Vin Diesel, Alicia Keys, Jeremy Irons, and others. Television broadcasts of the event aired live on national and international television stations, including National Geographic channels.

The Solar System Exploration Research Virtual Institute (SSERVI) hosted its fourth annual Exploration Science Forum in the Shenandoah Plaza. The three-day forum featured scientific discussions of exploration targets of interest, such as the moon, near-Earth asteroids, and moons of Mars, as well as science sessions about recent mission results and related studies. The event also included two workshops: the *LunGradCon* workshop for graduate students and early-career postdocs to present their research on lunar and small body science, as well as the *Autonomy on Future SMD Missions* workshop to explore mission concepts that could only be achieved by using advanced autonomy and robotic systems. Public engagement discussions were interwoven throughout the conference talks.

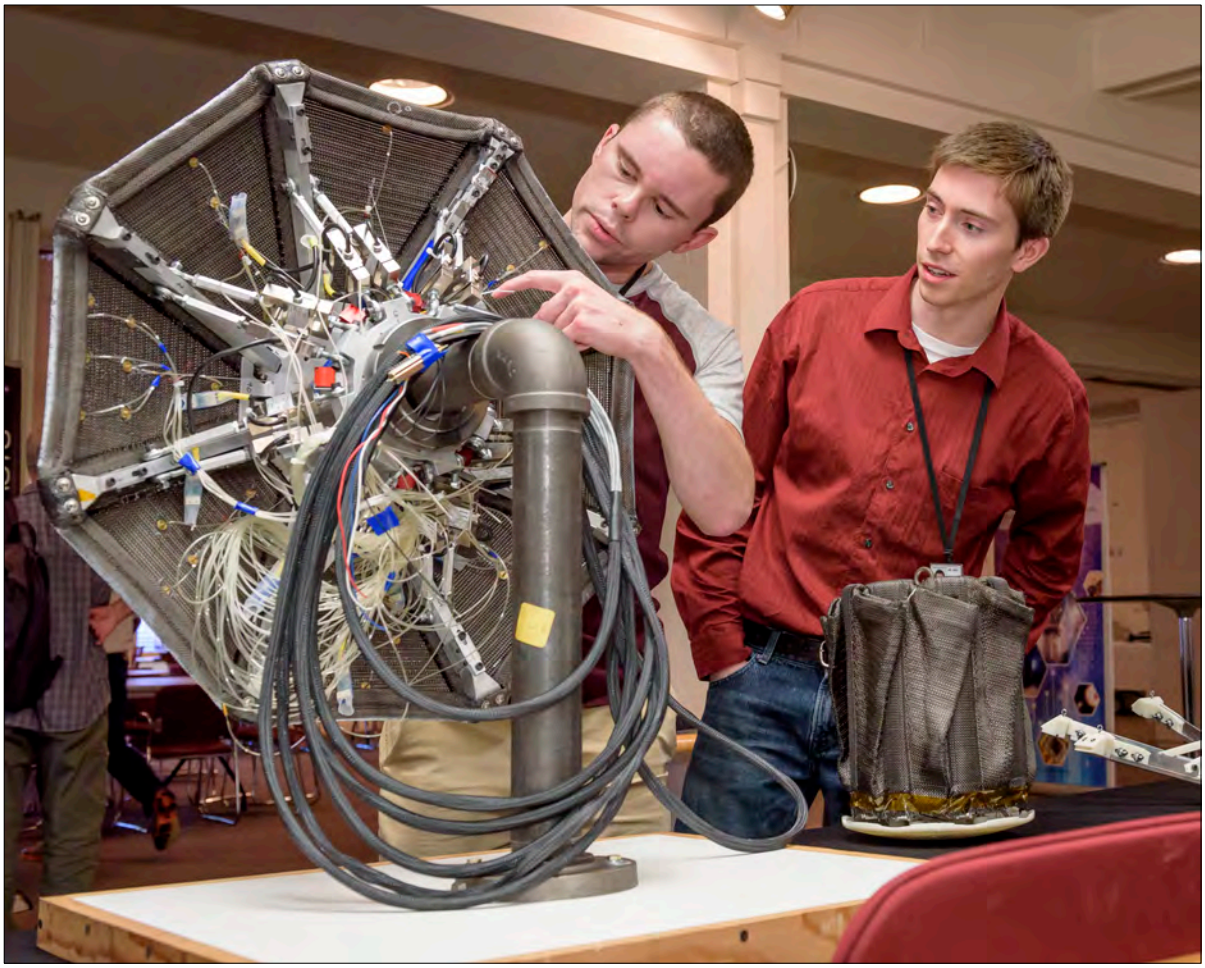
Scientists from around the world gathered in the Shenandoah Plaza for the fourth Kepler and K2 Science Conference to discuss the latest findings from the analysis of Kepler space telescope data. On the first day of the conference the latest planet candidate results from the Kepler mission were announced. And, a public event entitled *An*

*Evening with the Storytellers* featured a panel discussion about the sociological and cultural impact of the Kepler mission with. Panelists were Dennis Overbye from the New York Times, Nadia Drake from National Geographic, and Michael Lemonick from Scientific American. This event was also broadcast live.

This year's space sciences and astrobiology jamboree was held in the Shenandoah Plaza. The event included a poster session and over a dozen science talks, including an Outstanding Early Career Space Scientist Lecture presented by Thomas Bristow, and a Pollack Lecture by Bob Haberle.

Members of the Ames Earth Science Division showcased a poster presentation in the Shenandoah Plaza that featured work the division presented at the fall American Geophysical Union meeting in San Francisco. Presentation topics included climate change, atmospheric and ocean processes, Earth system modeling, new technology developments, and supercomputing methods and applications.

A mini summer picnic was combined with the center's second annual Innovation Fair in the Shenandoah Plaza. The fair was held with the primary goal of identifying new ideas to solve problems in the future as well as unrecognized problems in the present.



*Second Annual Innovation Fair and Mini Picnic* NASA image ACD16-0186-025
*Thermal Protection Systems and Materials Science Applications*
*Shenandoah Plaza National Historic District*

*Second Annual Innovation Fair and Mini Picnic*
*Meyya Meyyappan discusses nanotechnology*
*Shenandoah Plaza National Historic District*

NASA image ACD16-0186-011

*Second Annual Innovation Fair and Mini Picnic*
*Shenandoah Plaza National Historic District*

NASA image ACD16-0186-022

Throughout the year, various US Armed Forces units held change of command functions on the parade grounds of the Shenandoah Plaza National Historic District.
A flag raising ceremony was held on the Shenandoah Plaza National Historic District parade grounds to celebrate Memorial Day.